U.S. Patent Application Serial No. 10/532,084

Amendment filed March 28, 2007

Reply to OA dated December 19, 2006

AMENDMENTS TO THE CLAIMS:

Claims 1-6 and 8-20 are presented for examination. Claim 19 has been

amended.

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

Amend claims as follows:

Claim 1 (Previously Presented): A conductive resin composition comprising:

a conductive filler (A);

a urethane-modified epoxy (meth)acrylate (B) obtained by reacting an epoxy

(meth)acrylate (b-1) with a polyisocyanate (b-2); the epoxy (meth)acrylate (b-1) being

obtained by the an addition reaction of an epoxy resin having an aromatic cyclic

structural unit and/or an aliphatic cyclic structural unit and a (meth)acrylic acid; the

epoxy (meth)acrylate (b-1) having a hydroxyl value in the range of 100 to 300; the molar

ratio of moles of hydroxyl group of the epoxy(meth)acrylate (b-1) to moles of isocyanate

group of the polyisocyanate (b-2) being within the range of 1.0/(0.5 to 1.5);

a (meth)acrylate (C) having a number average molecular weight of 500 to

10,000, which contains 20 to 80% by weight of an aromatic cyclic structural unit and/or

an aliphatic cyclic structural unit and contains no active hydrogen atom; and

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the other ethylenically unsaturated monomer (D) which is copolymerizable with

the urethane-modified epoxy (meth)acrylate (B) and the (meth)acrylate (C).

Claim 2 (Original): A conductive resin composition according to claim 1, wherein

the epoxy resin contains 30 to 90% by weight of an aromatic cyclic structural unit and/or

an aliphatic cyclic structural unit.

Claim 3 (Original): A conductive resin composition according to claim 1, wherein

the epoxy resin is a novolac type epoxy resin.

Claim 4 (Original): A conductive resin composition according to claim 1, wherein

the (meth)acrylate (C) is obtained by reacting a reaction product, which is obtained by

reacting a polyisocyanate having an aromatic cyclic structural unit and/or an aliphatic

cyclic structural unit with a polyetherpolyol having an aromatic cyclic structural unit

and/or an aliphatic cyclic structural unit under the conditions that an isocyanate group of

the polyisocyanate is in excess of a hydroxyl group of the polyol, with a (meth)acrylate

having a hydroxyl group.

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Claim 5 (Original): A conductive resin composition according to claim 4, wherein

the polyetherpolyol having an aromatic cyclic structural unit and/or an aliphatic cyclic

structural unit is an alkylene oxide adduct of a multinucleate phenolic compound.

Claim 6 (Original): A conductive resin composition according to claim 1, wherein

the (meth)acrylate (C) is obtained by reacting a polyetherpolyol having an aromatic

cyclic structural unit and/or an aliphatic cyclic structural unit with a (meth)acrylic acid.

Claim 7 (Cancelled):

Claim 8 (Original): A conductive resin composition according to claim 1, wherein

a weight ratio of the urethane-modified epoxy (meth)acrylate (B) to the (meth)acrylate

(C) is from 95/5 to 50/50.

Claim 9 (Original): A conductive resin composition according to claim 1, wherein

the content of the conductive filler (A) is from 50 to 90% by weight.

Claim 10 (Previously Presented): A conductive resin composition according to

claim 1, wherein the content of the conductive filler (A) is from 50 to 90% by weight, the

content of the urethane-modified epoxy (meth)acrylate (B) is from 6 to 18% by weight,

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the content of the (meth) acrylate (C) is from 2 to 8% by weight, the content of the other

ethylenically unsaturated monomer (D) is from 2 to 25% by weight, and the total

percentage of (A), (B), (C), and (D) is 100%.

Claim 11 (Original): A conductive resin composition according to claim 1.

wherein the ethylenically unsaturated monomer (D) is an aromatic vinyl monomer.

Claim 12 (Previously Presented): A method for producing a conductive resin

composition, which comprises:

(1) the first step of kneading a conductive filler (A), an epoxy (meth)acrylate (b-1)

obtained by the addition reaction of an epoxy resin having an aromatic cyclic structural

unit and/or an aliphatic cyclic structural unit and a (meth)acrylic acid, a polyisocyanate

(b-2), a (meth)acrylate (C) having a number average molecular weight of 500 to 10,000,

which contains 20 to 80% by weight of an aromatic cyclic structural unit and/or an

aliphatic cyclic structural unit and contains no active hydrogen atom, and an

ethylenically unsaturated monomer (D); and

(2) the second step of reacting the kneaded mixture obtained in the first step with

the (meth)acrylate (b-1) and the polyisocyanate (b-2) at a temperature of room

temperature to 80°C, thereby causing chain elongation;

wherein the epoxy (meth)acrylate (b-1) has a hydroxyl value in the range of 100

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to 300; and, the molar ratio of moles of hydroxyl group of the epoxy(meth)acrylate (b-1)

to moles of isocyanate group of the polyisocyanate (b-2) is within the range of 1.0/(0.5

to 1.5).

Claim 13 (Previously Presented): A separator for a fuel cell obtained by

molding the conductive resin composition according to claim 1.

Claim 14 (Previously Presented): A separator for a fuel cell obtained by

molding the conductive resin composition according to claim 2.

Claim 15 (Previously Presented): A separator for a fuel cell obtained by

molding the conductive resin composition according to claim 3.

Claim 16 (Previously Presented): A separator for a fuel cell obtained by

molding the conductive resin composition according to claim 4.

Claim 17 (Previously Presented): A separator for a fuel cell obtained by

molding the conductive resin composition according to claim 5.

Claim 18 (Previously Presented): A separator for a fuel cell obtained by

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molding the conductive resin composition according to claim 6.

Claim 19 (Currently Amended): A separator for a fuel cell obtained by molding the conductive resin composition according to claim 7. claim 5.

Claim 20 (Previously Presented): A separator for a fuel cell obtained by molding the conductive resin composition according to claim 8.